

Rationalization buoys Alaska fisheries



Alaska has long been at the forefront of global fisheries. The state's fleet is one of the largest in the world, with state of the art vessels that can operate in any weather condition. The capital investment required to support this fleet is tremendous, and it has been supported through the privatization of fishing rights.

The creation of transferable fishing rights in Alaska has increased the value of fisheries and opened the doors to new investments, efficiencies and advancements on- and offshore.

The 1998 American Fisheries Act provided a framework for the industry to form private cooperatives that created transferable fishing rights. Fishery rationalization established the right to fish, and the quantity of fish each quota holder can harvest or process.

Transferable fishing rights can be controversial, as barriers to entry are created for new participants in the industry.

However, from a lender's perspective, transferable rights have provided tremendous economic benefits to fishermen and the industry.



By Sam Mazzeo

Quota shares and cooperatives allow fishermen and processors to slow down, diversify processing capacity, and maximize their product selection based on market demands and the size and quality of fish. Catcher-processors and shore-based processors

have added more fillet processing lines and opened more domestic and European markets for pollock, a previously little-known species. The implementation of the quota share program reduced derby-style fishing and increased the viability of the "fresh not frozen" market. Furthermore, more product can now be processed into higher value forms.

Fishermen are getting higher yields, and fish prices have increased. Eliminating the "race for fish" has doubled recovery rates and increased the value of the catch. Catcher-processors can simultaneously sort smaller fish into surimi lines

and larger fish into fillet lines, ensuring optimum use of the entire harvest.

Vessels owners have invested in lengthening and widening vessels and fish holds to pack more fish. They have purchased more efficient engines, better electronics, bulbous bows, auto-baiting machines, and made other vessel improvements. Owners can lease or buy incremental amounts of quota from each other to make for full loads and maximize the efficiency per fishing trip. Alternatively, in low quota years vessels can lease their quota if it is more efficient for other vessels to harvest for them. Efficiency is increasingly important as expenses like diesel fuel and marine insurance costs rise. Fishermen operating in rationalized fisheries also have more time to make repairs, mitigating lost cash flow during shore time.

Fishing rights give ownership of the resource to industry participants, who become greater stewards of their property. For example, pollock trawlers have invested in salmon-excluders that reduce salmon bycatch. Vessels and plants burn

Continued on page 31

Washington lookout

Ecosystem-based micromanagement



By David Frulla and Shaun Gehan

The Atlantic States Marine Fisheries Commission is developing the first coastal management program for menhaden. Referred to as "the most important fish in the sea," after Rutgers University English professor H. Bruce Franklin's book, menhaden have sustained industrial fisheries in the Atlantic

(and Gulf of Mexico) since the mid-19th century, frequently at two to four times above current catch levels.

Befitting a debate whose terms have largely been dictated by a science fiction expert (Prof. Franklin), the "most important" scientific facts are increasingly beside the point. Menhaden have become a cause célèbre. Indeed, judging from the massive public comment (90,000-plus just on the appropriate reference points), people from around the globe are deeply concerned for this tiny fish's future and its alleged inability to serve its ecosystem role.

The Atlantic menhaden stock, however, is just about at target level of abundance (99 percent, nearly twice the "overfished" threshold). For the final 10

years of the assessment (a full generation span), moreover, overfishing occurred in only the last year of the assessment, 2008. And, even then, by just 0.4 percent. That's a pretty good record.

That is not to say that all is rosy with this stock. Going back to the mid-1950s, recruitment has been cyclical. It was high in the early years and again in the mid-1970s to '80s; low in the 1960s and from the 1990s to present. Everyone would like to see improved recruitment, including the Atlantic states commission and the fishing industry.

Fortunately, even before enactment of a single management measure, there are signs the population is growing, which can be confirmed by next year's stock

Continued on page 42

Continued from page 33

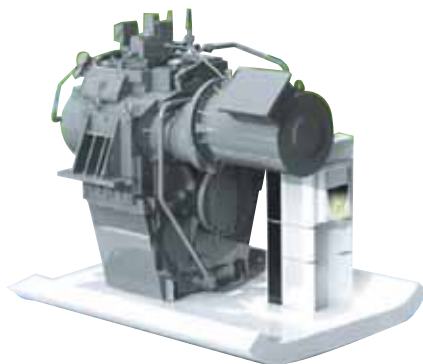


Hydrogen is stored in this tank for Global Marine Consulting's fuel system.

that were introduced in 2011 by Reintjes and marketed by Karl Senner. What appealed to the fishermen is the chance to operate efficiently at a low rpm level. That means burning less fuel and emitting less carbon dioxide and nitrogen oxide out of the stack.

The idea of a hybrid marine gear is fairly simple. On the back of the transmission is a power take-in flange where an electric motor is fastened. To run your boat off the electric motor, declutch the transmission from the diesel. Then the electric motor, powered by batteries or a generator, powers the transmission.

Reintjes' series of hybrid gears with



Reintjes' hybrid system matches up an electric motor to a marine gear.

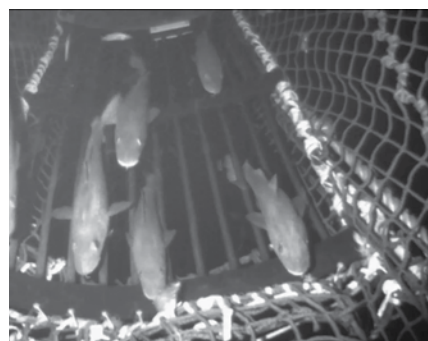
electric motors can be matched up with engines of 2,000 horsepower and below. The hybrid system can also be retrofitted to some existing Reintjes transmissions.

I spy

Now let's leave safety and fuel savings and mention a product that is definitely a first for commercial fishing in this country. That's Simrad Fisheries' new trawl camera that was introduced in November at Pacific Marine Expo in Seattle.

There are cameras that record what type of fish go into a trawl, but they don't offer a real-time view. You won't know what a camera has seen until you bring it back to the surface and play back the recording.

Simrad's camera is real time. So you are viewing what is passing into the net as it is going into the net. The camera



Simrad's trawl camera provides a real-time view of the fish going in a net.

can be mounted most anywhere on a trawl and uses the trawl sonar's third-wire cable for power and to send the video feed up to a wheelhouse display.

The camera should be a big advantage for fishermen worried about having their fishery shut down because of bycatch.

The camera shows you if you are on your target species or if bycatch is going into the net. The bonus is a better understanding of fish behavior and what happens to the net when towing in different situations.

NF

Michael Crowley is the Boats & Gear editor for National Fisherman.

For information on companies mentioned in this article, see page 45.

Washington lookout

Continued from page 8

assessment. This summer's aerial survey also reveals adult menhaden for which the assessment did not account.

The fact is, fishing has little influence over menhaden stock size. Predation and environmental factors affecting recruitment are the big drivers. On the other hand, the commission's management decisions will have major impacts on Atlantic Coast fishing communities. Potentially severe harvest reductions could be in the offing, affecting not only reduction and bait harvesters, but the lobstermen, crabbers, and others who depend on menhaden.

Menhaden, along with Atlantic herring, are at the forefront of the domestic campaign to establish a new norm for so-called "forage" stocks. Against well-reasoned, scientific counter-argument, the Marine Stewardship Council established

a blanket certification standard of 75 percent of unfished abundance for "lower trophic level species," a.k.a., forage fish. The same threshold was used for the krill fishery in Antarctic waters. Increasingly, these are offered as examples to force management bodies to adopt stringent new biomass targets for any "forage" fish. This campaign is abetted by NMFS' off-handed and statutorily unwarranted advice that councils "consider" managing such stocks above levels that produce maximum sustainable yield.

There is no universal or statutory definition of forage fish. A plausible list of candidate species is, however, quite long. Squid, mackerel, butterfish, herring, sardine, anchovy, shrimp, whiting, and any other schooling pelagic you can name, including pollock, are potential candidates for special protection. As we have noted before, there is no scientific basis

for this "more is better" approach. Nor is there reason to believe that managing for stock imbalance is "precautionary."

At best, this advice is a form of ecosystem-based micromanagement — a conceit that managers have enough information and ability to finely tune the marine environment. The less generous interpretation views the campaign as an effort to find reasons to force deep commercial catch reductions on stocks classified as sustainably fished under current legal benchmarks. Either way, at its peak, there were 150 vessels in the Atlantic menhaden reduction fleet. Today, that number is nine. Nearly 100,000 individuals and organizations say that's still too much.

NF

David E. Frulla is a partner and Shaun M. Gehan is an associate in the Washington, D.C., office of Kelley, Drye & Warren LLP.